



IRMELI MAUNONEN-ESKELINEN & TUOVI LEPPÄNEN (EDS)

OPEN AND DISTANCE LEARNING

DEVELOPING LEARNING OPPORTUNITIES
IN THE TEACHER EDUCATION IN NEPAL



JAMK UNIVERSITY OF APPLIED SCIENCES | JAMK.FI

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PUBLICATIONS OF JAMK UNIVERSITY OF APPLIED SCIENCES 215

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PUBLICATIONS OF JAMK UNIVERSITY OF APPLIED SCIENCES -SERIES
Editor • Teemu Makkonen

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Developing learning opportunities in the teacher education in Nepal

Cover Photo • iStock

Outlook • JAMK / Pekka Salminen

Layout and printing • Suomen Yliopistopaino Oy – Juvenes Print • 2015

ISBN 978-951-830-414-5 (PDF)

ISSN 1456-2332

DISTRIBUTION

JAMK University of Applied Sciences Library

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ABSTRACT

Irmeli Maunonen-Eskelinen & Tuovi Leppänen (eds.)

Open and Distance Learning

Developing learning opportunities in the teacher education in Nepal

(Publications of JAMK University of Applied Sciences, 215)

This publication describes the basis from which the structures, strategies and teaching and learning processes of open and distance learning were created and implemented for the first time at Tribhuvan University in Nepal. JAMK University of Applied Sciences has collaborated with diverse organisations in Nepal for several years. The development collaboration that this publication focuses on concerns the Training of Trainers for the Teacher Qualification Upgrading Programme in Nepal (ToT Nepal) funded by the Ministry of Foreign Affairs of Finland, HEI ICI programme. The main goal of the programme was to strengthen the expertise of Tribhuvan University in order to establish an open and distance learning system, and thereby to provide more flexible studying possibilities to teachers who are already working.

This publication provides viewpoints, concepts and some practices that have been discussed and worked on with the personnel of Tribhuvan University during the workshops. The concept of learning and pedagogy forms the foundation for the development of education. Therefore, the issue of learning shows as a cross-cutting theme in the articles. Furthermore, the context of the development of open and distance learning has a fundamental impact on the content of the development work. In the case of Nepal, the technology infrastructure is still rather weak and, therefore, starting from the basics reflects from the articles.

The writers were the experts in the above-mentioned project from JAMK and Häme Universities of Applied Sciences. The writers of the articles cover their role and expertise areas in the project.

Keywords: open and distance learning, teacher education, pedagogy

PROLOGUE

What do you need to take into account when you start planning open and distance learning in a country where the system does not exist yet? What are the viewpoints that you need to process and look for solutions? How to support the professional development of those who implement open and distance learning the first time?

More flexible and personalised study possibilities have been and still are an area that also has to be developed in Finland and other countries all over the world. In many developing countries, the key issue is how to strengthen equal educational opportunities for all and, in particular, for females and adults. The development of open and distance learning aims to address the needs of those groups. It also provides possibilities for life-long learning and promotes the quality of competences of the working population.

The goal of this publication is to introduce a basis for starting to establish and implement open and distance learning. The guiding idea of this publication is first to lead to the idea of open and distance learning, then to consider the pedagogical basis of it and finally to integrate continuing development into all phases of creating the open and distance learning structures and processes. The viewpoints that are discussed in this publication do not represent “the only model” of starting to establish new learning environments and studying opportunities, but a reader can get ideas for collaboration that aims to develop education with developing countries. The content of this publication exemplifies one case which cannot be copied as such because each collaborative action is shaped according to the needs of the partner.

The first two articles bring together different aspects and elements for creating the framework for open and distance learning. The following three articles discuss the pedagogical issues and, in particular, the teaching and learning processes. In addition, some methods used in open and distance learning are introduced in more detail. The last article focuses on continuing the development of the processes and practices of open and distance learning.

This publication covers the main themes that were discussed and worked on during the Training of Trainers for the Teacher Qualification Upgrading Programme in Nepal (ToT Nepal). The Training of Trainers programme was implemented at Tribhuvan University, Faculty of Education, in 2013–2015. The Ministry of Foreign Affairs of Finland, HEI ICI programme, funded the

Training of Trainers Programme. JAMK University of Applied Sciences, Teacher Education College, coordinated the development process and Häme University of Applied Sciences was a Finnish partner in the project. The purpose of the ToT project was to support Tribhuvan University to plan and implement the upgrading programme of working teachers through open and distance learning methodology. Tribhuvan University developed practical instructions for starting and implementing open and distance learning for its campuses from the basis of the contents discussed in this publication.

The development work between two different countries and cultures is demanding but the key factors are a common goal, common learning and ongoing dialogue. They are a way to gain mutual understanding and achieving project success.

INTRODUCTION

This publication comprises the themes through which an open and distance learning (ODL) system was developed in Nepal. The Ministry of Foreign Affairs of Finland, HEI ICI programme, funded the Training of Trainers for the Teacher Qualification Upgrading Programme in Nepal (ToT Nepal). The purpose of the ToT programme was to support Tribhuvan University, Faculty of Education, to implement the upgrading programme for working teachers by means of open and distance learning (ODL).

The purpose of the ToT project was for Tribhuvan University – Faculty of Education to be able, in a pedagogically and methodologically correct way, to implement the Teacher Qualification Upgrading Programme in Nepal, and thus to support the School Sector Reform Programme (SSRP) of the country. In the long-term, as a result of the project, Tribhuvan University will be able to revise the existing degree programmes and build new educational provisions in terms of using the ODL model benefitting from the experience gained during the HEI ICI project. Furthermore, the long-term development goal in relation to poverty reduction and SSRP is that, through ODL models, learners from remote and poor regions of Nepal (including women and people with different ethnic and social background) have increased and flexible access to higher education, which in turn contributes to decreasing social inequality and increasing the economic development of the country.

From the basis of the short-term and long-term goals and present situation, the development work was thematised to different approaches, which were worked on in parallel. The aim of this development measure was to ensure that different aspects of adults' learning, the structures and strategies of open and distance learning, use of modern technology and the idea of continuing evaluation and development were intertwined in all the phases of the ODL development.

The following themes formed the framework for the project:

- Open and distance learning (ODL) and information and communication technology (ICT) as a training model and educational method

- Pedagogy, adult learners' assessment and evaluation, and teacher's profession
- Development work.

Figure 1 summarises the core themes of developing in-service teacher training and ODL model. This publication concentrates on three themes: ODL, pedagogy and development.

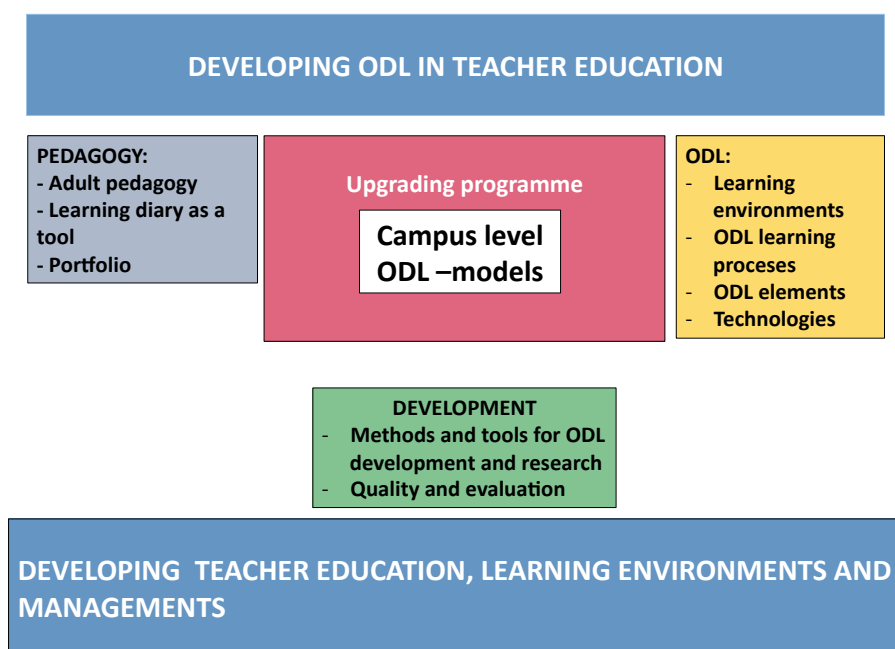


Figure 1. The Framework for Developing open and distance learning in the ToT project

The themes are relevant in developing any education processes that aim to provide more open, personalised and flexible learning paths that take advantage of the use of new technology. There is no one answer or model of modern education, but diverse answers and models that draw teachers and teacher educators to explore them.

OPEN AND DISTANCE LEARNING AS A TRAINING MODEL AND AN EDUCATIONAL METHOD

Irmeli Maunonen-Eskelinen

The main content of this article is to discuss the following themes:

- Open and Distance Learning and pedagogy
- Open and Distance Learning implementation models
- Technology in learning

The aim of this article is to provide grounds for the development of Open and Distance Learning.

PEDAGOGICAL VIEWPOINTS AS A FOUNDATION OF OPEN AND DISTANCE LEARNING

Current models of Open and Distance Learning are based on a modern understanding of learning, understanding of teachers' competences in ever-changing society and utilising new technology in learning. ODL solutions aim to provide better access to education, meaningful learning experiences to learners and to improve the quality of education and the use of diverse resources for learning.

Characteristic to the constructivist paradigm of learning is the construction of knowledge from the basis of learners' prior knowledge structures and experiences. Learning is an active, contextualised and individual process of constructing knowledge. As each learner has his/her personal knowledge structures, experiences and interpretation of reality, social interaction with others has an important role in the process of constructing knowledge. Through social interaction, learners' understanding and views are explored, tested and enriched.

Adult learners have established values, opinions and beliefs, diverse prior knowledge, cultural factors, life and work experiences and the current life situation that they bring into their learning process and construction of knowledge. From adult learners' motivation point of view, learning has to be meaningful, address their needs, and be appropriate for and take into account

their current lives. Adult learners often have a problem-based approach to learning and, therefore, context and applying learnt matters to relevant problems are key factors in learning.

The current understanding of learning and adults as learners requires a process-based and holistic designing of Open and Distance Learning. The process-based approach shifts the emphasis from teaching to learning in planning ODL. It also made us think about learning not only as a lesson or a course but also as a longer process in which different components are intertwined. A holistic approach takes into account different aspects of adults as learners and the development of the human being.

An overall goal of education is the development of human resources and competences. Regarding teachers' competences, continuous learning is an important competence area in modern society. Teachers must have the willingness and skills to learn new things because many changes are taking place in their environment and society. Furthermore, teachers must have an ability to develop learning environments for their students, so they should immerse themselves in different learning processes and environments. Teachers are no longer considered only as implementers of curriculum and others' plans but rather developers of their own work and education in general. These types of competence development can be realised through ODL since, at its best, it promotes goal-orientation, self-directedness and autonomy, and responsibility.

DEFINITION OF OPEN AND DISTANCE LEARNING

Open and Distance Learning has quite long roots in the US and Europe. Forms of Open and Distance Learning have changed over the decades from correspondence courses that were based on quite limited interaction between a teacher and a student, to international massive open online courses (MOOC) which are interactive forums for huge numbers of students, teachers and diverse experts from different parts of the world.

In order to think about the models and implementation of Open and Distance Learning, it is necessary to look at a definition of the concept of Open and Distance Learning. Open and distance learning is defined as follows (Open and Distance Learning, 2002):

- learning that takes place where **distance or time separates** the teacher and the student,

- learning may be **synchronous in a one-to-many or one-to-one** environment where learning takes place in real time,
- learning environment may be **asynchronous** and separated by time and distance, where learning takes place at a time selected by the learner, and the learner progresses at his or her own pace, independent of others.

The definition brings up the diverse aspects of ODL, which have to be taken into consideration in designing ODL models. ODL models are often designed so that all the different forms are blended, and thus learners can study at their own pace, take part in group sessions and work with others, and get individual tutoring and support. Besides the teacher–student aspect, the student–student aspect is important in designing ODL models. The guiding approach is to plan students' learning processes instead of planning only teaching, and to provide an as rich learning experience to the learners as possible.

THE IDEA OF A LEARNING ECOSYSTEM

According to modern understanding, learning takes place anywhere and happens all the time and the learning outcomes, competences, develop through formal, informal and non-formal ways of learning. Adult learners are involved in various learning environments like university and the school environment (formal), work environment, virtual environment and home and hobby environments (non-formal). Different environments are overlapping and sometimes it is difficult to say where the learning outcomes come from. This leads us to think of how we can provide a learning environment which enables multifaceted learning.

The concept of a learning ecosystem helps us to rethink the designing of learning processes, in particular, resources for learning. The concept also might take us out of the traditional box of education, turn over the walls of classrooms, and discuss the diverse roles of all who are involved. Firstly, let us consider the definition of an ecosystem in natural sciences as a metaphor for a learning ecosystem: *Ecosystem is a complex of living organisms, their physical environment, and all their interrelationships in a particular unit of space. An ecosystem's abiotic (nonbiological) constituents include minerals, climate, soil, water, sunlight, and all other nonliving elements; its biotic constituents consist of all its living members. Two major forces link*

these constituents: the flow of energy and the cycling of nutrients. The fundamental source of energy in almost all ecosystems is radiant energy from the sun; energy and organic matter are passed along an ecosystem's food chain. There has to be an appropriate balance between the various pieces of a biological ecosystem so that the organisms living within it can thrive. Similarly, a learning ecosystem includes different elements that provide a structure, support and resources for learning.

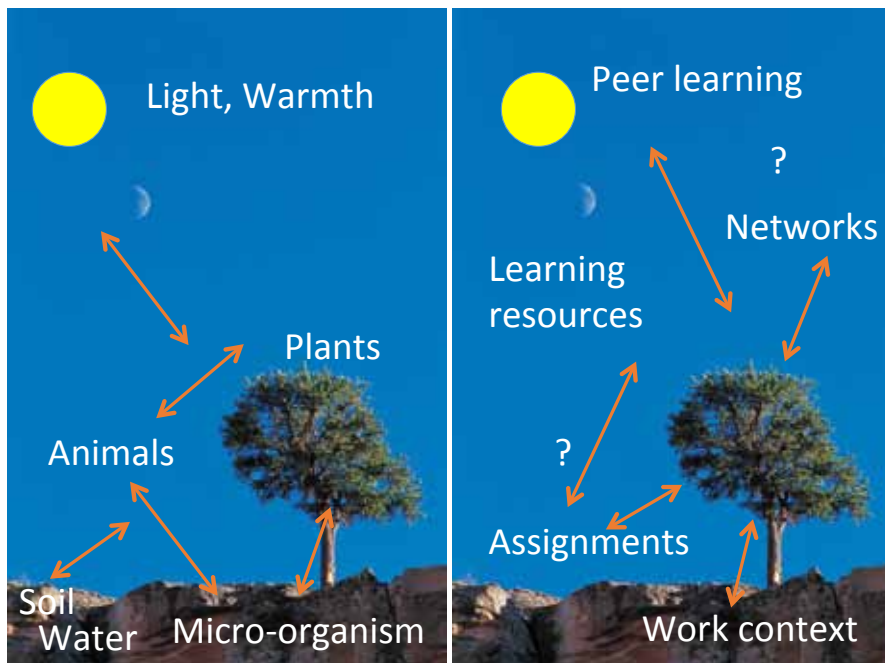


Figure 1. The concept of a learning ecosystem

We have to carefully consider each element of the learning ecosystem, and to understand how they are connected with and support each other. We should ask what the “abiotic – non-living” and “biotic – living” elements and “the linking forces – flow of energy and the cycling of nutrients” are in the learning ecosystem that we are designing, and how we balance them so that the whole system provides a good ground for diverse learners and their learning needs.

SOME ELEMENTS OF ODL

There is not just one universal model of a learning ecosystem to present or a need to build up one. Learning ecosystems can include different elements. The concept of an ecosystem carries an idea of biomes, which are bigger local areas, and in which environmental factors and the population are similar. Good examples of the locality of ecosystems are, for example, tropical, tundra or desert ecosystems. Accordingly, learning ecosystems must be based on local needs, possibilities and the overall context.

As we are now discussing designing a learning ecosystem for adult learners in the context of formal education, a university degree, there are some elements that exist in many cases. The elements can vary in the different phases of a learning process. They can be picked and mixed in many ways.

The following elements are in use in the implementation of ODL:

- Learning resources:

Learning resources is a wide concept, which, firstly, covers written materials in both electronic and paper form. Secondly, there can be diverse visual learning materials like movies, videos, animations, pictures and symbols. Thirdly, auditory learning resources include presentations, lectures, stories, songs, and radio broadcasts. And finally, there are tactile learning resources, which mean everything we can touch and experiment and work on with hands.

- Face-to-face learning session:

Face-to-face sessions can be workshops, seminars, lectures and tutoring to big and small groups. They can take place at the university, local schools or any other physical environment. Besides that, face-to-face sessions can also take place online by using online conference software like Adobe Connect Pro or Microsoft Lync or Google Hangout, Skype or something similar.

- Learning circles:

Learning circles are small groups that can be established from the basis of subjects, so that in one learning circle, all members represent the same subject or there is a mix of different subjects. Learning circles can be

formed from a geographical basis, in which case members come from the same area. In addition, the learning circles can be established from the basis of interest and focus of development that the members have. For example, those who want to develop eLearning can work together despite their subject and location. Learning circles can work together face-to-face on-site and online.

- Assignments:

Assignments are elements of ODL that combine learners' needs, their reality and context, wider goals of the education and pedagogical foundations for learning. Good assignments provide possibilities to bring up learners' experiences, to use a variety of media and activities in learning and to focus on theories and concepts that are relevant to the problems and context of learners. Thus, the assignments should be open enough. Assignments that are meaningful strengthen the working life relevance of education.

- Self-studying:

Self-studying has been a distinctive and quite domineering feature of ODL. Self-studying happens through learning resources and diverse activities (like interviewing someone, observing something or someone or doing something). In self-studying, learners also utilise networks and informal resources.

- Tutoring and support:

Learners need tutoring and support from the university, local tutors and mentors at schools. Tutoring and feedback can be in written or oral form. Mails, emails, telephone conversations, video feedback and recorded written comments on a document sent by the learner and spoken explanations are different ways to give tutoring, feedback and support. Tutoring is an integral part of the learning process: learners receive feedback and support during their learning process, from the beginning until the end. Tutoring aims to help learners reach learning goals and outcomes of good quality. Adult learners' questions, comments and output should be treated with respect.

- Peer assistance and support

Adult learners are huge resources for themselves. Peer support has often been experienced as the most valuable and meaningful element of ODL. Learning circles are one way to build up a structure of peer-assisted learning and support but in each element of ODL this angle should be considered. Opportunities for dialogue among learners should be provided.

- Assessment

Assessment and tutoring go hand in hand. Thus, assessment is a continuous and essential part of the learning process. Assessment information is gathered from different points of view. Learners' self-assessment is important because it develops metacognitive skills and continuous learning competences. It brings learners' personal experiences into the assessment discussions. Peer assessment provides information from persons who are equal and go through a similar process. Professors of the university, local tutors and mentors at the schools assess the learning process and outcomes.

In designing the learning environment (ecosystem), we have to decide what the elements of the learning process are that support learners in achieving their goals. In addition, we have to think about the diversity of learners and their preferences in processing information. For example, if learning resources are only written texts, they serve those who acquire information by reading but do not support that well those who need visual information. It is not enough just to decide the elements of the learning environment; we have to process and be explicit about what the meaning is of different elements of the learning process in terms of professional development (learning goals). In addition, there should be a pedagogical model or pedagogical principles within which the design of the learning process and how the chosen elements are organised time-, place- and pace-wise are based on.

Figure 2 below illustrates by way of symbols a sketch of a learning process which includes four main milestones, supportive elements that vary in different phases of the learning process. The symbols can represent any of the above-mentioned elements or even something not mentioned in this text. However, the point is that the pedagogical understanding, idea and choices become visible by visualising the learning process. The figure can work as tool in planning and in communicating the ideas with others.

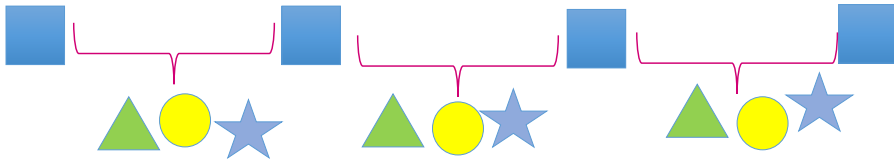


Figure 2. Process of ODL

A pedagogical script and flow guide the order of the elements and their meaning in different phases. There are two main flows: 1) from face-to-face sessions to assignments and 2) from assignments to face-to-face sessions. The first one represents a quite traditional pedagogical script. The basic idea is to progress “from theory to practice”, and thus contents and concepts are introduced first, and then assignments are given. The face-to-face time is used for delivering the content. The second pedagogical flow represents an idea of a “flipped classroom”. The learning process starts from assignments. The content is learnt individually or in groups from the basis of assignments and learning resources. The face-to-face time is used for sharing and deepening the content in groups. Besides the two main pedagogical flows, there are numbers of variations that are in use. The point here is that pedagogical strategies, principles, scripts and flows determine choices.

TECHNOLOGY AND MEDIA OF ODL

Modern technology has nowadays a strong role in implementing ODL. Sometimes ODL is discussed as being the same as web-based learning, but we should not put an equal sign between these two. Already in the times of correspondence courses, technology was involved. Pen, ink, pencils, erasers, printing machines, and delivering systems were needed. The ODL process took quite a lot of time from the beginning until the end. The digital era has made it possible to process, use, produce and deliver information immediately.



Figure 3. Some media of ODL

Technology and media have to be considered from different viewpoints: learners, learning, university, technology.

Activity:

1. Discuss in groups as to why ODL should be developed as a part of the education system. Consider the issue from different points of view.

	Learner	Teacher	Workplace	University	Society
What are the expectations and wishes regarding ODL?					
What are the requirements/needs regarding ODL?					
What is the value of ODL?					

2. Form small subject-based groups. Make a sketch of the different elements of the ODL model to your subject area. Explain what the function of the elements is in the process. In addition, make a plan for the tutoring and assessment processes. You may use Figure 1 or a table for illustrating your idea. Share your outcome with others.

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ODL – OPPORTUNITIES AND CHALLENGES

Tauno Tertsunen

ODL is an opportunity but it is also a challenge for training organisations and their staff. The whole staff of the training organisation must rethink their work to take advantage of the possibilities of ODL. ODL is not only an Information and Communication Technology – technological or learning environmental view of learning. A pedagogical view of ODL is just as important as a technological view.

Effective and successful ODL needs a rethinking of the learning process to organise learning. The whole staff of the training organisation must understand the differences between teaching processes and learning processes. In learning processes, students are in the centre of the action but in teaching processes, teachers' work and action are in the centre. It is not very important as to what teachers are doing; it is more important to understand how to make learning possible for different learners. However, teachers are not useless – they are one very important element in learning processes to guide and facilitate students' learning.

In case of ODL, there are different teaching and learning elements that could be used to make learning possible. Of course, in ODL-based teaching and learning process there could also be same learning process elements as in traditional elements. The most important thing is to concentrate on planning the learning processes instead of the teaching processes.

WHAT ARE THE BASIC ELEMENTS OF PLANNING LEARNING AND TEACHING PROCESSES?

When we are speaking about ODL, we are usually speaking about technology based or technology exploited teaching and learning. The meaning of “Open” describes students' possibilities to use a different kind of learning possibilities and facilities. The meaning of “Distance Learning” is an idea of education which means that learning is possible in different places and different situations – not only at a certain place and time during organised education.

Mishra's & Koehler's TPCK theory and the picture below describe technology based and ODL-based education quite well.

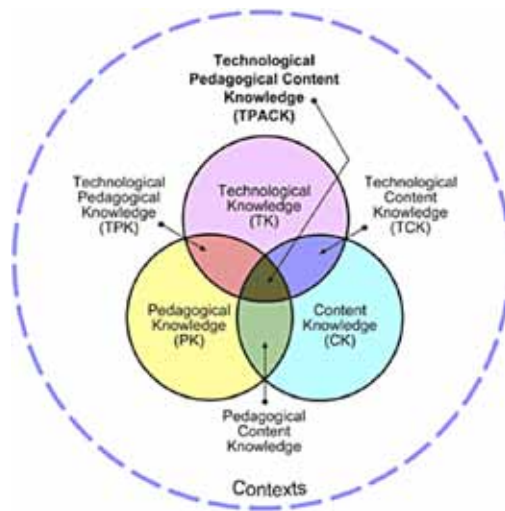


Figure 1. Technological Pedagogical Content Knowledge (TPCK). Koehler & Mishra (2008)

Mishra's & Koehler's TPCK theory includes different elements which are important in designing and planning a different kind of education – not only ODL-based education:

- a) **Contexts:** context describes the learners and learning situation,
- b) **Content Knowledge:** content describes the learning contents, learning topic or learning subject,
- c) **Pedagogical Knowledge:** pedagogy describes the learning methodology or learning methods,
- d) **Technological Knowledge:** technology describes the learning environments and learning facilities,
- e) **Pedagogical Content Knowledge:** describes how certain learning content could be learnt,
- f) **Technological Content Knowledge:** describes how certain learning content could be learnt in a certain technical environment,
- g) **Technological Pedagogical Knowledge:** describes how a certain pedagogical method could be used in a certain technical environment,

- h) **Technological Pedagogical Content Knowledge:** describes the learning and teaching process: how certain content could be learnt in a certain technical environment using certain learning and teaching methodology.

Designing learning processes always starts from the context. Teachers need to know where learning will happen and who the learners will be. Context describes the boundary conditions for learning. It is a different thing to start planning learning for secondary education in Nepal than learning for adults in Finland.

When we know who our learners are and where the learning will happen, we can start to plan the learning and teaching process:

- Firstly, we have to know the learning content. It is a different thing to learn the theoretical content than the practical skills.
- Secondly, we have to know how certain learning content could be learnt. It is quite clear that if the learning content consists of practical skills, then the best learning methods are practical methods – not, for instance, lecturing. Learning always depends on the content and the learning method used.
- Thirdly, we have to know what kind of technological learning environment and learning facilities we have for making learning possible. Also this could be understood the other way round: what kind of technological learning environment and learning facilities we need for making learning possible.

PLANNING ODL-BASED LEARNING AND TEACHING PROCESSES

Below is a picture of the ODL learning and training process. There are different elements that must be included in all ODL courses and implementations. The amount of the ODL elements could vary in different subject based courses and in different implementation processes. The main message of the picture is to demonstrate that ODL thinking is always learning and teaching process thinking: how to make learning possible for ODL students.

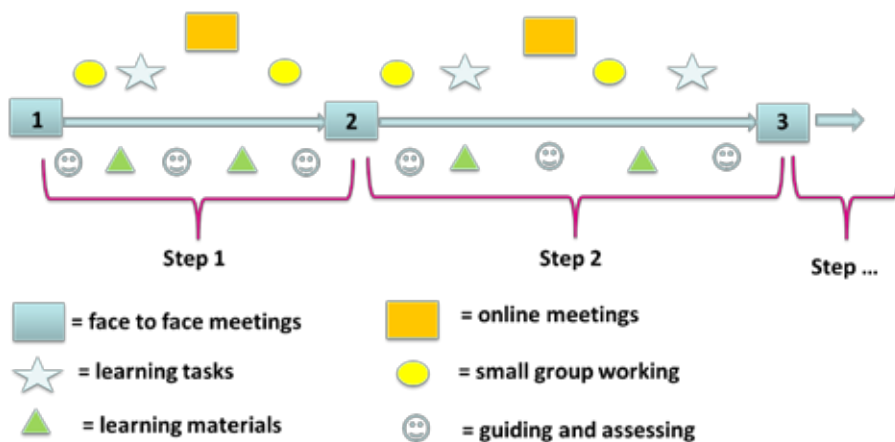


Figure 2. ODL learning and teaching process. Maunonen-Eskelinen & Tertunen (2014)

The main structure of the ODL process consists of the “on campus” meetings and distance learning periods. The amount of the on campus meetings and distance learning periods could vary in different ODL courses. ODL elements in the picture above and their meanings in the ODL processes are:

- a) **Face to face meetings:** are “on campus” meetings where all the students and teachers gather at the same place and also at the same time,
- b) **Online meetings:** are virtual meetings using different kinds of Information and Communication Technology (ICT) tools and software (e.g. Skype) and all the students or certain members of the students’ group gather in the same virtual place at the same time but geographically they could be in different places,
- c) **Learning tasks:** are given to students by teachers to make sure that students’ learning activity focuses on the right things so that students’ goal-oriented learning is possible,
- d) **Learning materials:** are planned, prepared and chosen by teachers to help students learn the goals of the course and help students to perform learning tasks given by ODL teachers,

- e) **Small group working:** is collaborative working between members of the students in certain small groups to make peer guidance and peer assessing possible,
- f) **Guiding and assessing:** is continuous collaborative working between the teachers and students to make the learning processes as continuous as possible.

Face-to-face (f2f) teachers usually have a group of students physically present in the same classroom. If f2f teachers notice that the teaching methods they have chosen do not work in certain situations, they can change the teaching method quite quickly and the learning processes will continue. ODL teachers' students are individual learners all around the country in different places. If ODL teachers notice that the planned learning processes they have chosen do not work in certain situations, they can also try to change the teaching method, but sometimes it is impossible. Teachers cannot, for instance, add more face-to-face meetings if the structure of the training programme is accepted early. ODL forces teachers to think and plan the implementation process of the course much more in advance than in f2f implementation.

To get one's own experience of using ODL as a tool of one's own studies is a very efficient way to learn the idea of ODL. During the own ODL learning process, everyone can understand the meaning of the individual learning process, collaboration working, guidance and assessing, being visible, etc. Teachers can get ODL information from books and best practices of ODL from their colleagues. The best teacher is practice – the best orientation for ODL is learning by doing. By participating in an ODL-course, teachers get their own experience with ODL, which helps them to understand the main idea of ODL.

Moreover, in the end, some starting points of how to develop ODL teachers' competence as an ODL teacher:

- ODL teachers must have experience of their own in ODL as a tool in their own learning
- team working: one experienced ODL teacher could work together with one beginner ODL teacher
- benchmarking method: to share ideas and learn from experiences with colleagues
- sharing best practices: organise the possibilities for teachers to share good working practices

- build up different virtual communities – social web (e.g. Facebook) and build up professional virtual groups to co-operate and to develop ODL in education as a society.

However, we must always remember this: You can get a horse to the water but you cannot force it to drink the water!

ODL VS. FACE-TO-FACE (F2F) LEARNING

Physical presence is one of the most separating things if we compare co-operation between teachers and students in ODL and f2f learning. In f2f, learning students can physically see and sense teachers' presence. In ODL, students cannot see teachers but they can sense their presence or absence.

Students are individual persons and they have individual learning styles and learning strategies. In addition, their metacognitive skills are different and varied. Students' self-directedness skills vary when they are studying different learning contents. It is very important for teachers to know their students' self-directedness skills. Teachers must change their guidance role as a teacher depending on the students' self-directedness. Those students whose self-directedness skills are poor (they are dependent) need more guidance than those who are more self-directed. See Grow's graph about the dependence between students' self-directedness and the teacher's guidance role.

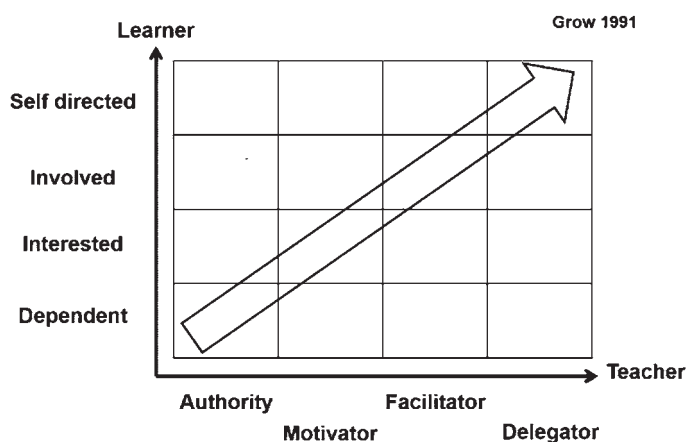


Figure 3. Staged Self-Directed Learning (SSDL) model, Grow (1991)

Also in case of ODL, it is very important for students to sense teachers' presence. If students need guidance then the teacher must be available for students; otherwise, the student feels that he/she has been left alone with his/her learning and gets frustrated.

ODL – ADMINISTRATIVE VIEW

To change thinking from teacher-centred thinking to student-centred thinking will not happen very quickly. Usually the traditional way to plan and organise teaching could also work quite well. That is why we sometimes ask if it is necessary to change anything because we already have a working model which is working quite well.

In case of changing something concerning our work, we must answer some questions. We must develop questions which help us to understand the change management process.

Question 1: Do we have to change something? Are there any external forces or are there any internal demands so that we have to change our working?

If the answer is yes, then we must be ready to answer the next three questions

Question 2: Where are we now? We must define/describe the present state, get the information about our situation and make an analysis about it.

Question 3: Where do we want to get to? We must define/describe the future state/outcome.

Question 4: How do we get from here to there? What needs to be changed? What needs to be sustained?

Finally, like one Nepalese professor said: "if we have the will, then we can find a way".

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PEDAGOGY AND THE TEACHER'S PROFESSION

Tuovi Leppänen & Mari Kolu

GROUP-BASED APPROACH AND STUDENT-CENTRED LEARNING PROCESS

- Meaning of groups in learning
- Social capacity in a group
- Group culture
- Methods in group-based learning
- Teacher's role in the student-centred learning process

DIFFERENT GROUPS AND LEARNING

As teachers, we work mostly with groups and group members. Every group that we face in our work as a teacher educator is different. Some groups seem to be passive or they need lot of time to warm up for the common study process. Some groups, in turn, are active and they start to work immediately after their teacher has introduced a theme and a task to them. Therefore, it is important to understand the different groups, group development and group processes.

There is no overall theory concerning group dynamics or group leading. Student groups might go through the lifespan with the following phases: 1) forming, 2) storming 3) norming 4) performing and finally 5) closing and celebration. But groups are different based on their purpose, tasks or nature, so this is not the only truth of the lifespan of groups. You can read more about group dynamics and group theories by following the links below this text.

The group-based approach does not disappear in an Open and Distance Learning education model. The learning group still exists, although it is partly invisible or a group meets via a mobile or a computer.



Picture 1. The team of teacher trainers working together (Picture: Tuovi Leppänen, 2013).

All groups are different by their nature and purposes, and all groups have a social capacity. Social capacity means e.g. interaction skills in the group, group members' intelligence resources or collaborative learning processes. The group is always the sum of each member's different capacity. Actually, the sum will increase through common work. In the group, one plus one is more than two. Therefore, it is always much more than an individual.

Social capacity is a huge source for learning. Group members support each other's learning process by co-operation, dialogue and shared responsibility. In group learning, there is not only "my learning", there is also "our learning". Concretely it emerges in group work, group tasks and other co-operation tasks. But it is also like mental capacity, which we have in our groups.

In order to promote a good learning process, all groups need to have enough similarities and enough differences. Similarities might come from the same subject, the same working environment or the same learning culture. Differences come from opposite features in a group. Regardless of the group members' background, they might create an intensive group process and learning environment.

The key point for all learning groups is that they have the opportunity for social interaction. The following mandala is called the interconnections. It might be seen as a symbol for a learning group. We need enough interconnections in our learning groups in order to develop or facilitate a good learning platform for our learning groups. Mandalas are very harmonious pictures, but if you look at them carefully you can see that all cusps are slightly different. All group members are different in all learning groups but still through interaction they can form a harmonious group learning process.



Figure 1. Blatner A. 2015. Mandalas.

LEARNING CULTURE

Group culture always emerges during the learning process. Something new will be developed. Just as in how groups are the sum of their individual group members, group culture is the sum of the cultural features that group members bring with them to a group. Based on that, all groups develop their own learning culture, which is like a combination of individuals' cultures. Group culture emerges through interaction, common work, shared knowledge and relationships between group members. Learning culture is like a frame for the whole learning process.

To achieve good results in learning, we need to have social capacity and supportive group culture. Therefore, a good and warm atmosphere is needed. Every group member needs to feel that he/she belongs to the group and is appreciated as a group member.



Picture 2. The summary of discussion of the group (Picture: Tuovi Leppänen, 2013).

GROUP-BASED METHODOLOGY

Methodology in group-based learning helps group members interact with each other. Such kinds of methods like pair discussions, group discussions, demonstrations or role taking support social capacity building. Theoretical viewpoints are able to concretise with common action. It is a way for abstract facts to become real life and up to a concrete level. Concretising deepens the theory and links participants to the theoretical aspects. It is said that tacit knowledge comes to be visible and heard. Also students' different opinions or viewpoints come into the part of the learning process.

Interactive lecturing means that the teacher encourages students to express their opinions, knowledge, experiences or insights. The teacher might cut his/her speech for a while and ask students to discuss and express their ideas. This way, the student is in the centre of teaching and the students' learning is in the focus. Motivation increases a lot when the students understand that their knowledge and experience are also important for the teacher and the other group members.

The learning circle work increases students' commitment in a learning process. It is significant in the ODL process that students have a feeling of belonging to the group between face-to-face sessions.

TEACHER'S ROLE

The teacher has a significant role in a group-based methodology. As we saw hereinabove, a group is not able to work by itself without teaching or guiding. A teacher works as a facilitator of the whole process. He/she sets the aims of the learning process in co-operation with the students. The students become familiar with the learning process step by step, but the teacher knows the whole process. He/she is a guide, a tutor and a facilitator. When students and student groups do not know how to continue, the teacher looks for a pathway towards the goal together with the students. In a way, we can say that the teacher is a “face of hope” for students in the learning process.

The second mandala here is like a symbol of the teacher's role in group-based and student-centred learning. There, all the members of the group are equal to each other. They look different but they are equal. This mandala shows how the teacher is a part of the group. Here, the teacher is one member of the group, but still differently visible. Group members are in the circle and the teacher is one of them. However, he/she is a person whom you can recognise easily. The teacher has a comprehensive responsibility for the learning process, teaching process and organisations of the courses. The students' comprehensive responsibility is to take care of their own learning, own tasks, co-operation with other group members and finally they are responsible for their results. In the middle, you can also see what the group has created, learnt and produced together.

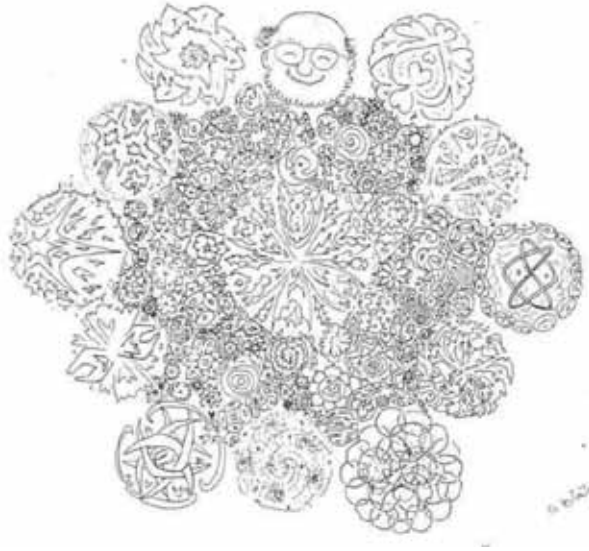


Figure 2. Mandala with the teacher (Blatner A. 2015).

QUESTIONS TO THINK ABOUT:

- 1 What kinds of ideas do you get based on the text?
- 2 How can you apply a group-based approach in your own teacher educator's work?
- 3 Which kinds of challenges does the ODL model produce for the group-based approach?
- 4 What is essential in a group-based and student-centred approach in the Nepal context?
- 5 How have we used the group-based and student-centred approach in ToT workshops?

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TUTORING IN OPEN AND DISTANCE LEARNING

- Learner-Centredness in ODL
- Tutoring dimensions in ODL
- Group guidance
- Role of ODL Tutor

LEARNER-CENTREDNESS IN ODL

The goal of the open and distance learning education model and training is implementation which prioritises learners' needs rather than institutional purposes. This means that the students' need to study and graduate on time is at the centre of all planning and implementation of education in a university.

It is enabling learners to pursue their studies in a way that is appropriate for their circumstances, learning goals and learning style. For the educational institution, this means providing good quality learning materials and appropriate and accessible media to use. It is also about giving sufficient support to ensure learners have a good chance of successful completion.

TUTORING DIMENSIONS IN ODL

Tutoring in open and distance learning consists of personal support, academic guidance, group guidance, guidance in teaching practice and technical and material advice. Personal support means personal discussions with students. There, the tutoring teacher listens to students' questions and needs. The purpose of personal support is the encouragement of the student to achieve his/her goals. Students are often unsure as to what to do and how to continue their studies. In personal support, the tutoring teacher helps the students continue their studies in this uncertainty phase.

In addition, it is important that a teacher hears and sees the students as a person in tutoring situations. A student is not only one student, but rather a student with his/her background, working history, personal style of learning, etc. As we have learnt, adult students have a more varied context than younger students, so it motivates and helps an adult student a lot if a teacher really knows him/her. We can call this approach a dialogical approach in tutoring. A teacher and a student are equal as people, but still a teacher has the responsibility to help the student learn and the student has his/her own responsibility to study and learn.

Academic guidance means offering content knowledge to students. It is subject knowledge and knowledge about the studies. The academic guidance helps students to understand the whole study structure. Moreover, academic guidance includes course material (e.g. SLMs) offering and suggestions to select the course material (e.g. reference books). Assignments are often challenging for students, so the introduction of the purpose and structure of assignments is necessary for students. Adult students often work independently and need a clear view on how to do assignments.

Students need advice and tips in academic skills and how to study, for example

- Time management
- Using SLMs
- Essay writing
- Material searching from the Internet
- Presentation preparation

Advice can be delivered in many ways, such as

- Contact sessions
- Individual guidance
- Online

Assessment of learning is necessarily one of the tutoring teacher's tasks, including in the open and distance learning education model. It includes the assessment of knowledge and skills (competences). Especially adult teacher learners are often very skilful and part of their assessment also covers the assessment of the skills. It is an essential part of their capacity as teachers. Finally, part of academic tutoring is record keeping by teachers.



Picture 3. Working in the ICT classroom (Picture: Tuovi Leppänen, 2015).

GROUP GUIDANCE

In group guidance, the tutor's role starts from the very beginning of the group lifespan. It is meaningful as to what kind of group has been developed in the beginning of studies. The criteria for group building vary a lot according to the task and purpose of the group. If a group is formed only for one task, more flexible group building is possible, but if a group needs to work for longer term towards challenging aims, we need to evaluate rather carefully as to what kind of group is appropriate for working. The criteria might be like a similar kind of subject, geographical similarities, gender-based or interest-based division.

After divisions of the group, a guide needs to help groups to find their goal and working methods, if needed. Some groups are very independent even in the beginning, but some groups need more guidance to start working. One important task for the tutor is to give an introduction and guidance for assignments to groups. It is important because assignments are very essential learning tools for ODL students. In the introduction phase, a tutoring teacher implements information sharing and academic guidance. Why are we doing this assignment, what is the purpose of the assignment, etc. Also information on how to do the assignment is very important. In that way, students are able to start the task smoothly. It also helps students to work together.

A very important part of guidance is face-to-face guidance. If it is possible, it is very good to meet groups when needed. Surely this is not possible when it comes to far distances and a lack of time, but if it is possible, it helps students work independently. When groups are ready and assignments are done, the tutoring teacher should organise a session where the students can share their outcomes and discuss with other students; share their knowledge and main findings. The tutoring teacher gives feedback and other students may give their comments, ask additional questions and learn more about a topic.

GUIDANCE IN TEACHING PRACTICE

One key component of the teacher studies through the ODL education model is teaching practice. Teaching practice can be implemented combined with a teacher's own work in the other classrooms or with a group other than the teacher's own group. Or it is also possible to go to another school to do the teaching practice. The tutor's role is to help teacher students select their teaching practice place. Often it is beneficial to go to another school for widening contacts, finding new ideas or positively affecting the other school.

During the teaching practice, guiding (supervising) discussion is very useful for the teacher student. It is the time when even an advanced teacher is still open for new learning and new ideas. External guidance is needed to clarify new learning. Through assignments during teaching practice, the working teacher also analyses her/his learning outcomes. Going through assignments, a guide gives tools for learning.

And again after teaching practice, sharing experience and learning outcomes with other students is necessary for teacher students. It is a way to deepen the learning process.

Tools for teaching practice tutoring are e.g.

- Orientation task
- Learning diary
- Portfolio work
- Evaluation task

TECHNICAL AND MATERIAL ADVICE

The guiding teacher (tutor) needs to explain the structure of studies for adult students. It is important to introduce how to use different tools in ODL. They might be ICT tools but also other kinds of material that an adult teacher students need during their studies, such as a study guide, curriculum or exam material. The tutor helps to build a bridge between learners and the study material. It might have been a long time since a teacher has studied and so they need guidance to understand the study material, especially if it is in an electronic model.

Nearly always the campus needs to organise basic training for using ICT tools. The tutoring teacher can offer basic guidance but the campus is responsible for organising the proper ICT training with its experts.

Students need information concerning e.g.

- Qualification
- Curriculum
- Contact sessions
- Learning methods
- Teaching methods
- Fees
- Exams
- Technology

Information can be delivered in many ways e.g.

- Written notice (letter by post)
- SMS messages
- TU/Campus leaflet
- TU/Campus webpages
- Email
- Skype phone
- Introduction in Facebook, Moodle, Twitter

ROLE OF THE TUTOR

The tutoring teacher plays a key role in supporting a student in the ODL education model. He/she helps learners to succeed in ODL studies. The tutoring teacher builds a bridge between learners and the study material and is the face of the learning process. If an adult student studies alone a lot, he/she needs interpersonal contacts and the tutoring teacher is the most important one.

The tutoring teacher also takes care of communication through printed or electronic media or technology, if it is in use. The tutoring teacher is a key person in the learning process, in which he/she gives the learner the freedom to be in control of his/her own studies. Aspects of the adult student's learning process are freedom and responsibility. They go hand in hand. In general, this means support in a learner's process where the student on his/her own volition causes things to happen.

Finally, the tutoring teacher helps learners become aware of how they can contribute to their own learning. This means that the tutoring teacher takes care of the reflection of learning with one student and with the whole student group.

Main Principles in Tutoring:

- Planned activities in co-operation with students
- Institutional resources are needed to be organised
- Blended interaction (face-to-face, distance setting, etc.)
- Require responsibility from both sides

QUESTIONS TO THINK ABOUT:

- What are the best practices in tutoring on your campus?
- How can you support your students in taking part in tutoring?
- What kinds of groups are the best learning groups in your subject?

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ADULT LEARNERS IN THE ODL STUDY MODEL

- An adult learner and the starting point of new studies
- New challenges for adult learners
- Previous experience of adult learners
- Learning strategies
- Evaluation and outcomes of studies

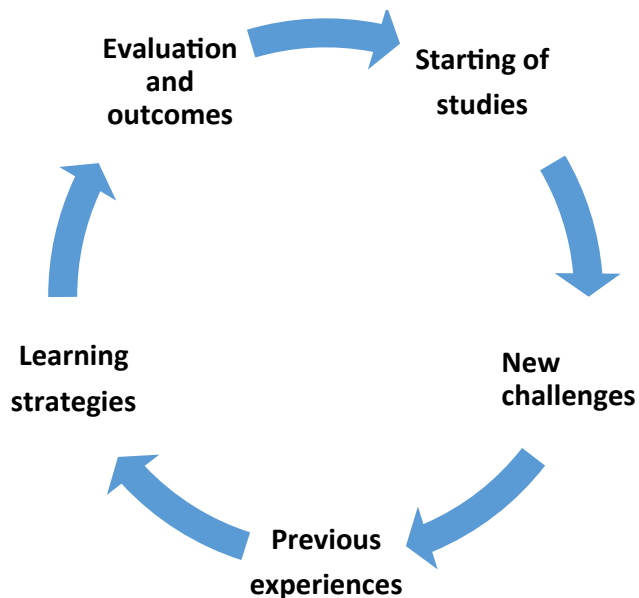


Figure 3. The ODL study model.

STARTING POINT OF STUDIES

Every adult student comes to future education with his/her own background and life situation. They might have a family, with family duties like taking care of other family members, food, etc. In Nepal, we noticed that the situation faced by female students differs greatly from that of male students. Studying is very much gender-based.

Most adult students have a workplace, where they need to work every day. It means that the time to use for future studies is limited. Usually adult

students are very motivated to study although they have lots of things to organise before they have the possibility to study. In addition, region, religion and cultural group are very meaningful matters. A social group might support or resist future studies. If an adult student lives near the capital or another big city, it is much easier to attend future studies than if an adult student lives in a remote area.

As teachers we need to, and we are able to, welcome all students regardless of their background. One challenge is that some students might be older than us. Some students might even have been our own teachers years ago. So we need to create new roles between us and our students. Also age is one question. Younger students have a different situation than senior ones. Here, we come to the next point of adult learning.

NEW CHALLENGES

When adult students start their new studies, they will face several challenges. Senior students have different learning abilities and skills than younger ones. The whole education tradition has changed after their previous studies. For example, ICT skills have become significant in the learning culture. Adult learners might not have any experience with ICT. If they live in an area where Internet services are new or there is a lack of services, it is challenging to learn new skills. In this situation, there might be some motivation issues among adult students.

One challenge is to settle down into a new role as a student. Adult students might have a long career as a teacher. When they go to further studies and the teacher is much younger than themselves, the situation requires totally new attitudes from the adult students. Again this means that the teacher needs to respect an adult student as he/she is.

Here comes the motivation as a challenge again. If adult students attend further education because of their own interest, it is easier. They have so-called internal motivation. Motivation grows from themselves. Motivation might be also external and it means that the students are forced to study for example due to new degree demands. In that case, a tutoring teacher of adults needs to try and create internal motivation. Adult students might react with resistance. It is very important to accept adult students' resistance to change. If the teacher accepts adult students' resistance, it might melt and new learning is then possible. It is good to remember that challenges are also opportunities.

A good way to call motivation out is to take adult students' previous experience seriously.

PREVIOUS EXPERIENCE

Every adult learner already has previous study and work experience. They might have worked over ten years or even more. This means that they have lots of knowledge of their subject matter and they have skills to teach. Previous experience functions as the basis for future learning. We can see previous experience from two angles. One is that it is a huge resource for future learning. Learners do not start from zero. They can benefit from their experience and new learning builds on prior competences. Previous experience of adult learners means a much wider range than just work experience. Also activity in other life areas can be used in the learning process. These might be hobbies, family life, social activity, etc. Learners are able to integrate new learning with all of their previous experience.

Tutoring teachers can use their previous experience as resources for new learning by using experimental teaching methods. They might be like discussions of previous knowledge or they might be some action where adult students can show what they know and what they can do.

Another angle is that previous knowledge might prevent new learning. Old habits and attitudes might work as barriers against new learning. In that situation, tutoring teachers need to be very patient towards their adult learners. They need to still motivate their students for new learning and changes.

The question is how to integrate new attitudes, new ways to learn, and new skills with the previous capacity. This means that adult students need to learn new learning strategies.

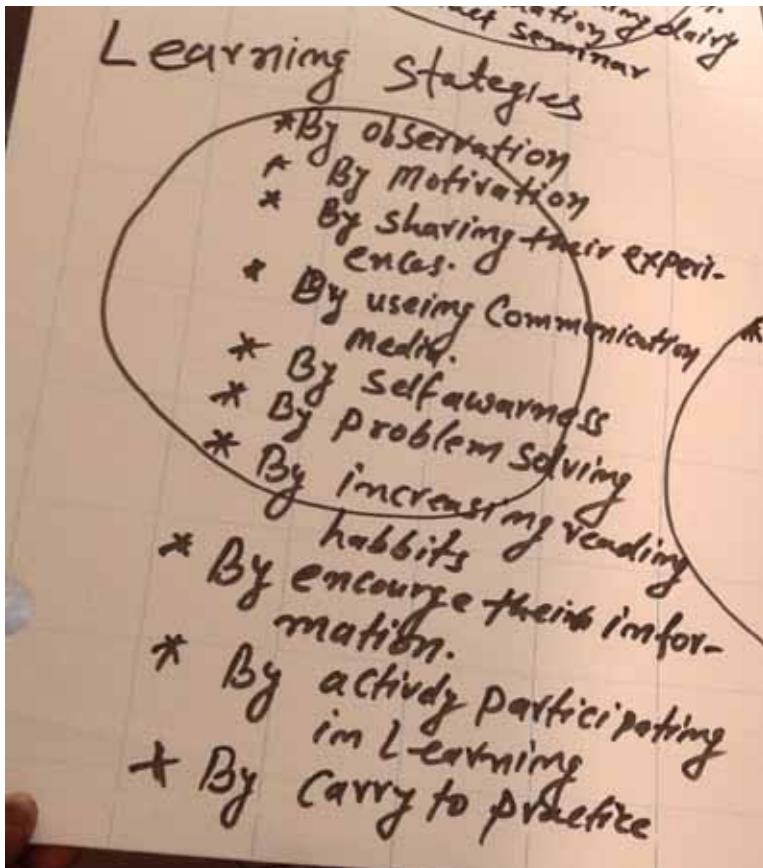
LEARNING STRATEGIES

All learning strategies are relevant for adult students. Especially co-operative learning strategies are very workable, where adult students are able to share their previous experience and share their knowledge. All previous experiences, learning outcomes, knowledge and insights are material for new learning. In the sharing process, doors open for the new and deeper understanding.

Practice is very relevant learning for adult learners. In practical learning, an adult learner is able to use and test their new learning outcomes. Adult learners are able to apply their new knowledge and skills into their previous competences. It is not practising basic things any more, but it is like new applications of new methods. New knowledge and skills are integrated into the previous ones.

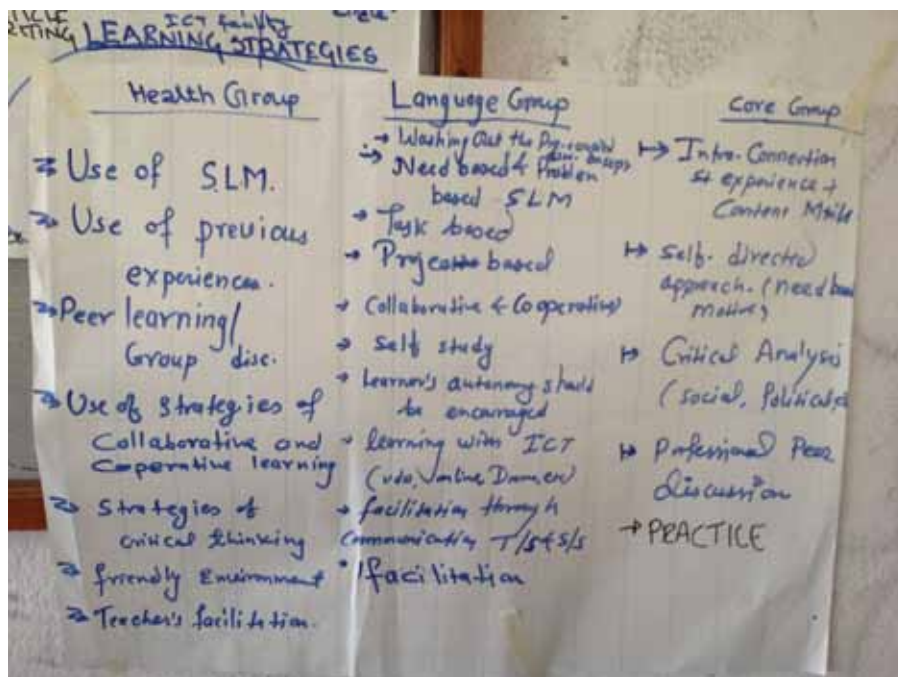
New learning strategies offer a deeper understanding for an adult learner. He/she is able to use various methods for the new learning. In Training of

Trainers workshops, we found e.g. the following strategic approaches of an adult learner. Here, learning strategies are integrated in the learning methods.



Picture 4. The outcome of the group discussion (Picture: Tuovi Leppänen, 2015).

The picture 5 below shows how the teacher educators saw adult learners' learning strategies in the Training of Trainers workshop.



Picture 5. Outlining the learning strategies. Picture: Tuovi Leppänen, 2015).

EVALUATION

Self-evaluation and peer evaluation are aspects in adult learners' learning process. By self-evaluation, an adult learner recognises his or her strengths and future learning needs. A peer evaluator might be an equal learning partner for adults. A peer is able to give a new perspective to learning. Adult learners also need feedback from an external evaluator. The aim of the external evaluation needs to be in future learning, not only evaluation of learning outcomes. Also a process evaluation is important. During a process, an adult learner is able to make changes and improvements. An evaluation gives the value to the learner's process and development. An evaluation is always a tool for the new learning.

OUTCOMES

Outcomes of adult learning can be divided into two levels: an individual and societal level. In the individual level, an adult student gains a new professional identity by studying. He/she has learnt new ways to work and higher competences as a teacher. A higher degree offers new job opportunities. A better salary is also possible. Through studies, an adult student has also found new professional friends and networks. New co-operation might have been started. One important outcome is also increased self-confidence. Self-confidence is also linked to the societal level. If teachers have strong self-confidence, their role becomes stronger in society.

If we think of the societal level, it is important to notice that the teacher's profession is not necessarily valued in the Nepal context. Therefore, the very important outcome of studies at an adult age is to secure dignity in society. It is essential that education offers more than only a degree. The whole teaching profession will be better recognised in society through better self-confidence, future education and higher degrees.

QUESTIONS TO THINK ABOUT:

- 1 What kinds of ideas do you get based on the text?
- 2 How can you apply the principles of adult learning in your own teacher educator's work in ODL courses?
- 3 Which kinds of challenges does the ODL model produce for the adult students' learning process?
- 4 What kinds of adult learning principles can you find in the implementation of ToT workshops?

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TEACHER'S PROFESSIONAL DEVELOPMENT

- Professional development triangle
- Steps of a teacher's professional development
- Teacher's self-realisation

TEACHER'S PROFESSIONAL DEVELOPMENT

What we do as a teacher shows what kind of teachers we are. Our actions reveal our professional orientation. At the beginning of the ToT project, we went through how Nepali teachers see their work as a teacher and in what direction they should go in order to develop a good teaching profession.

Our values are one component in a teacher's profession. We do our work based on our values. We have learnt our values from our own parents, relatives, social environments and very strongly from our own teachers. One step in teachers' professional development is to become aware of our values and commitments.

Another component is professional skills and abilities. It is also partly inherited, but it is also an ongoing changing process. As teachers, we learn all the time. We learn from our colleagues, through future studies and from our students. Our students are our teachers.

Professional knowledge and understanding is a wide, learning environmental question. It increases during our career as a teacher and we are not often aware of it. It is like tacit knowledge. It is in our mind and in our actions, but we are not aware of what it is and how we have gained it.

Hereunder, you can see how these three elements are connected to each other and how they affect our actions.



Figure 4. Professional development triangle

TOOLS FOR PROFESSIONAL GROWTH

A novice teacher is a newcomer to the teacher's profession. He/she has usually graduated a short time ago and does not have many years of working experience. A novice teacher is often energetic and enthusiastic in performing his/her work. The fresh education offers him/her new ideas and vision regarding how to work as a teacher. Sometimes the starting phase of a new profession is like fulfilling one's own dreams. Some novices also have the will to make changes in their own professional field, but they do not have much experience in the working life. A sense of reality has not grown yet, so they may face resistance from senior teachers and they become frustrated. Newcomer teachers need patience in order to go through their novice period in a successful way. Newcomers' contacts and networks come from study environments, not from working life.

An experimental teacher has got a few more years of work experience than a novice. He/she is still curious to try new methods as a teacher. Also their content knowledge is new. This step is like an exposure phase in a professional development. The teacher has a realistic vision regarding how to do work as a teacher, but they are still open for new innovations and experiments. An experimental teacher is not afraid to try, but is still vulnerable towards colleagues' comments and critique. Experimental teachers need lots of support and encouragement.

An advanced teacher is already competent in analysing his/her profession from the wider perspective. They are also competent in developing their work based on their work experience and theory. Their networks are developed in the working life environment. This step is quite challenging because advanced teachers already know what they can do and what they still need to learn. In a way it is serious step. Secondly, it is also very rewarding because advanced teachers' outcomes are better and deeper than new ones. They can thrive on the long-term results.

A professional teacher has many years of work experience. It might mean more responsibility in their work. Some position of trust may have been offered to a professional teacher. Responsibility often means a bit more freedom, the freedom to organise one's own work independently and the freedom to develop one's own interests. They might be a bit more flexible in their professional action. Professional teachers often have a readiness to start something totally new. It might be new projects, new development in teaching or even a new subject area. It might even offer a new position. A professional teacher has grown up as a capacity builder.

Here, you can see one of the professional development models.

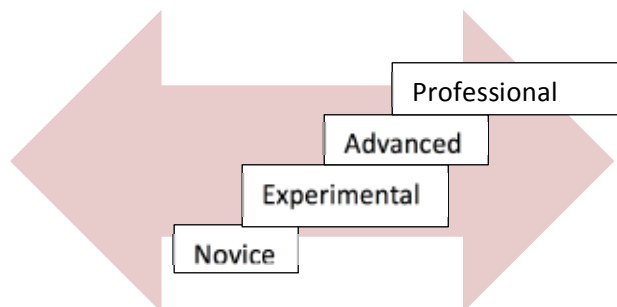


Figure 5. Steps of professional development (T. Leppänen 2015).

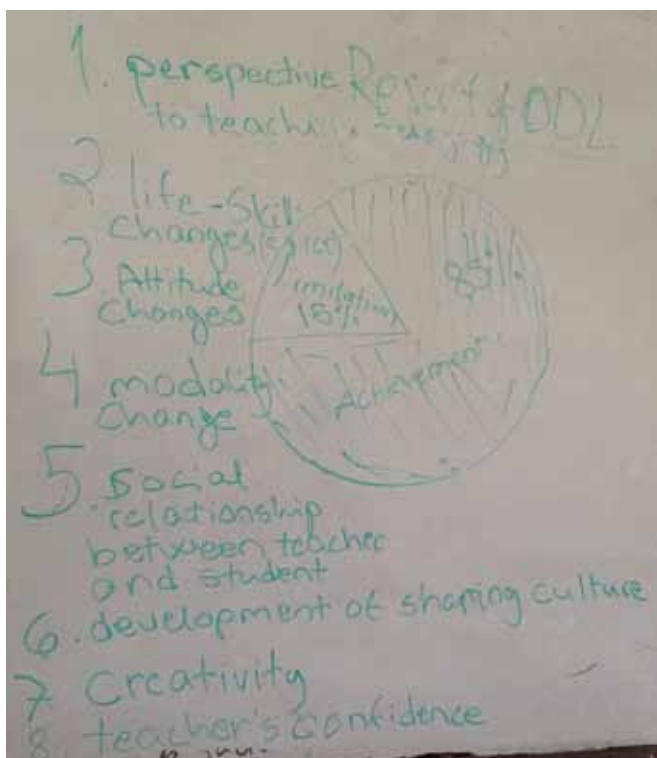
A teacher's professional development never ends. Different students and changes in society and education guarantee the continuous development needs. In the figure above, we can see the arrow proceeding in both directions. This means that in some aspects a teacher might be at a professional level, but in some aspects he/she might need to start from the beginning, novice level. However, a teacher's professionalism strengthens over the working years. The ongoing professional growth makes a teacher's work very fascinating.

TEACHER'S SELF-REALISATION

In the beginning of the ToT project, we looked at the teacher's work in Nepal. Many challenges, such as narrow commitment, low motivation and facility challenges, were reported. At the end of the project, we returned to the issue. The picture here shows a few aspects that have been seen to be involved in the changing process during the last two years.

One participant drew that the achievement part has been 85% and the limitation has been 15% to achieve the results in ODL development.

Things involved in changing process have been a) the perspective to teaching pedagogy, b) life-skills, c) attitudes, d) modality of the education, e) social relationship between teacher and student, f) development of the sharing culture, g) creativity and finally h) teacher's confidence.



Picture 6. The experienced changes of the participants of the ToT. (Picture: Tuovi Leppänen, 2015).

From the perspective of the professional growth and teacher self-realisation, the above changes have been huge. Awareness of the current situation and the development direction is the key issue in the empowerment process as a teacher.

QUESTIONS TO THINK ABOUT:

- 1 What kinds of ideas do you get based on the text?
- 2 Evaluate your own professional development based on the figure. What are the professional areas where you are in the novice, experimental, advanced or professional level?
- 3 What is the direction you are willing or dreaming to go? Set your development goals as a teacher educator.
- 4 Also think of the means which you can use in your future development.

SUGGESTIONS FOR FURTHER READING:

Teachers are professionals, too. Really? Since when? 2010. Accessed 11 June 2015. Retrieved from <http://lessonslearnedteacher.blogspot.fi/2010/09/teachers-are-professionals-too-really.html>

METHODS AND TOOLS FOR SUPPORTING LEARNING

Mari Kolu

LEARNING DIARY AS A LEARNING TOOL

A Learning Diary can be a diverse tool for learning. It is a personal learning tool which enables students to specify and reflect on the aims of their studies and work. It can include both independent and group-based studying.

The other important goal for the learning diary is to support students' professional growth, from the novice, whose order of priority is often based on spontaneous observation, to experts, who concentrate on the essentials. While students are considering their own learning process they at the same time develop their skills to analyse, synthesise and evaluate the environment. They are growing into professionals and developers.

Typical for learning diaries is that they support analytical and reflective thinking. Contents of the learning diary can be facts, experiences, feelings, reactions, understanding, applications, analysis, synthesis and evaluations.

In learning diaries, students analyse their own feelings, experiences and findings/perceptions. They also make self-assessments according to the objectives. Students describe the learning situations, e.g. what happened. How did the people behave? They consider the importance of those actions to themselves. The learning diary also includes notes from the material the students have read, like diverse ideas, most important ideas, unclear things or things to be checked. They describe and analyse both good practices and things that need to be developed, or how they can use the new ideas in future. Students can consider "what have I learnt, what do I want to learn and what do I think, what things are unclear, what should I ask or find out?" Understanding is a process where the students' expertise is developing.

The aims/goals of the Learning Diary is to boost:

- self-assessment and self-reflection
- personal development
- recognising students' own weaknesses and strengths
- clarifying concepts and theories
- combining theory and practice
- continuing evaluation

The learning diary makes the learning process visible/observable. It combines students' action and reflection, self-assessment and development. They also can plan their studies and make their own goals more concrete. It is useful to clarify the ideas and conclusions with graphs, drawings, figures and mind-maps.

Students start writing the learning diary at the beginning of studies and keep it going until the end. It is useful to write the diary at least once a week. The structure of the learning diary can follow the studying process or students can write it accordance with objectives and competences. Alternatively, it can be a combination of both perspectives. Regularity and reflection are important.

Students can document their own observations and experiences in many ways. The learning diary may contain texts, blog entries, drawings, photographs, mind maps, paper clippings etc. Because the writing process is often nonlinear, mind maps are useful while students are organising their thoughts.

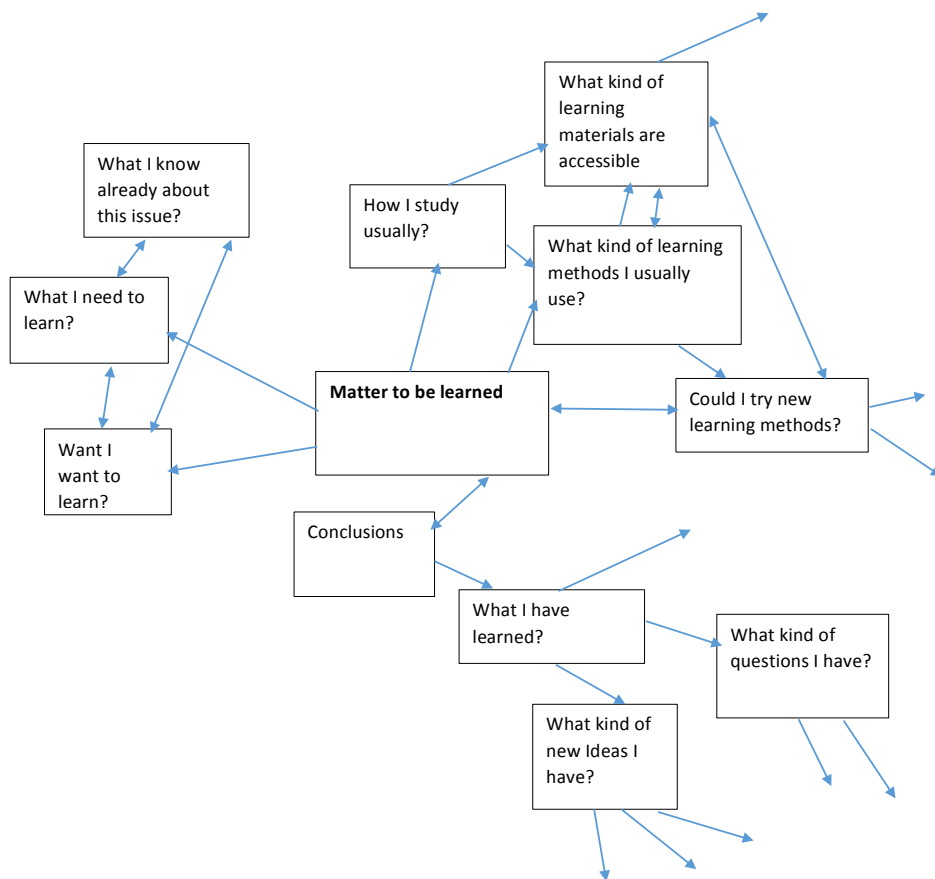


Figure 1. The mind map (concept map) can help students organise their thoughts.

Tips:

In the beginning of the learning process, write in your learning diary about things that you already know and what you want to learn. What are the objectives/aims/goals of this process?

During the learning process, write down the main ideas, meaningful ideas, unclear things, opposite opinions, and how to use ideas in future. Analyse, make conclusions, evaluate contests, materials, learning methods and yourself as a learner.

At the end of process, make conclusions: what you have learnt? How did you learn? Your strengths and the things you need to develop in future.

Use drawings and figures as well.

In the learning diary, the students are able to write informally about their own opinions on professional skills, knowledge in general, themselves as learners, learning processes, their own teaching skills and the way that they think learning changes during their studies.

The writing process is easier to start if you give the students some concrete questions, beginnings of sentences, advice and ideas. Some examples are provided below, but you can formulate your own so that they are useful to your own students.

When the students are able to retell the things and describe their observations or ideas of the matter, they have achieved the first step. The second step is to compare and analyse the relations between things; it is more of an analytical process. Finally, when they are able to draw conclusions and state opinions, they have achieved a deeper understanding.

Table 1. Retell, relate, reflect. Rolheiser, C., Bower, B. & Stevahn L. 2000.

<p>Retell Retell in your own words Summarise the information State the main idea List the sequence of ideas Point out details Describe significant parts Clarify information</p>	<p>Related prompts may include This was about... I noticed that... The most significant part was... A thought I especially liked was... I particularly liked, valued, or enjoyed... An idea that captured my interest was... Keywords for me were... An idea that “sparkled” for me was...</p>
<p>Relate Make connections Refer to personal experiences, books, media, issues, events, related topics, feelings Compare Contrast Analyse Give examples</p>	<p>Related prompts may include This reminds me of... This makes me think of... Something I identify with this is... It makes me feel... What I found especially meaningful or significant for me was...</p>
<p>Reflect Draw conclusions beyond the text or situation Apply judgement State opinions Share insights and new understandings Ask relevant questions Give reasons for what you did</p>	<p>Related prompts may include Now I understand that... I think that... I wonder why or if... I realise now that... How...? A question raised in my mind is... Maybe... Something that you wrote that pushed my own thinking was... I learnt that you... An idea that “sparkled” for me was... because...</p>

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THOUGHTS ON TEACHING METHODS

Orvokki Joki-Pesola

Teaching methods are methods designed to promote student learning. The choice of method is of great importance for both the teacher and the students.

There is an unlimited number of teaching methods and new ones are developed all the time. Typical of these are, for example, lectures, individual work, various types of group work, project work, writing, study conversation, concept maps, learning logs, panel discussions, role plays, debates, drama techniques, brainstorming and exhibition walk.

Teaching methods can be roughly divided into two main categories: teacher-centred and learner-centred methods. Methods can be divided in other ways too, but this is the most common. In teacher-centred methods, the teacher is visibly active, and in learner-centred methods, the learner is visibly active. The teacher's role is, therefore, different in teacher-centred methods (e.g. lecture, demonstration) and in learner-centred methods (e.g. teamwork, drama). The matter is illustrated in Figure 1.

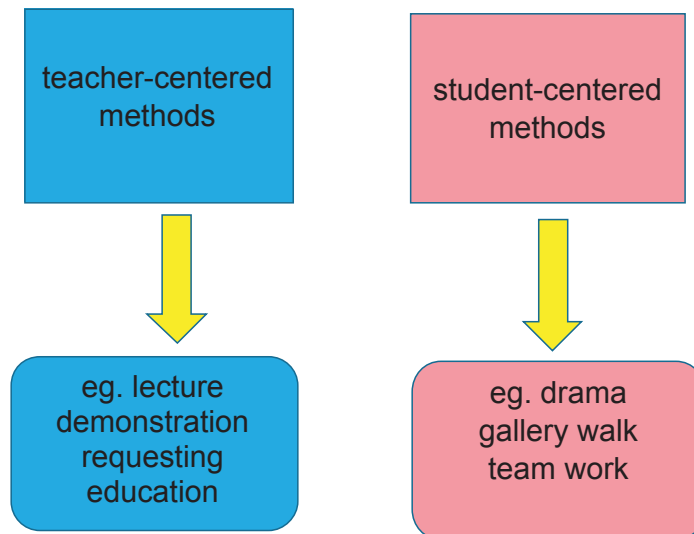


FIGURE 1. Teacher-centred and student-centred methods

What methods the teacher uses is influenced above all by his/her own human perception, concept of learning and understanding of knowledge and how much he/she knows about different pedagogical models and teaching methods. The teacher applies to teaching these things, even if he/she does not realise it. He/she, therefore, applies them, even though he/she has not the slightest trace of pedagogical knowledge. That is why a responsible teacher must develop pedagogical knowledge to a sufficient level so that he/she can make an informed choice.

When the teacher selects the teaching methods, he/she must take into account the learning environment (classrooms, computer network, or any other environment), the group of students (age, size, level), the matter that is studied (knowledge, skills, attitudes) and the resources (facilities, equipment, materials, etc.). This issue is illustrated in Figure 2.

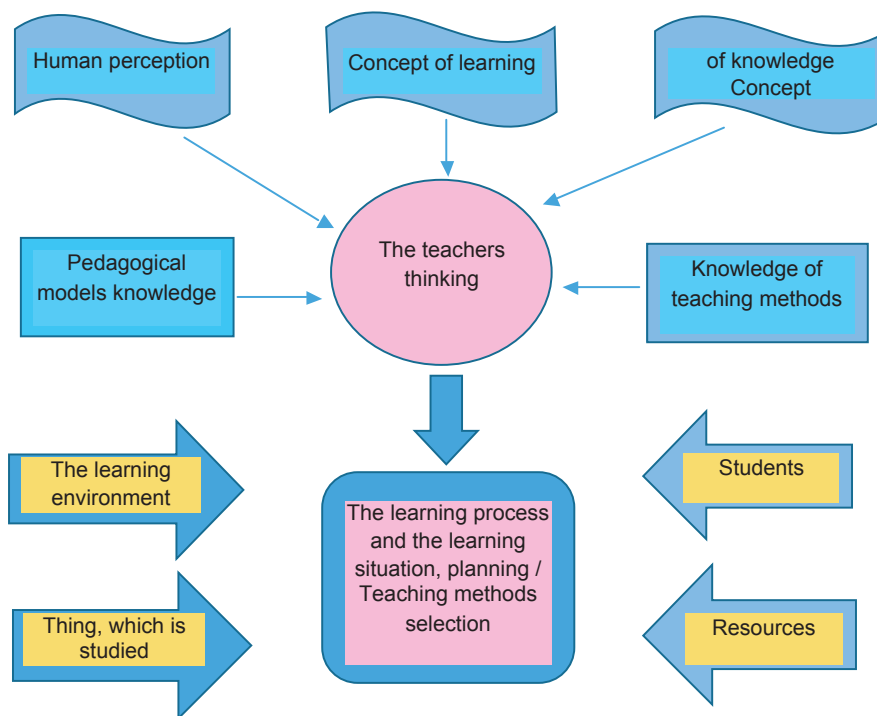


FIGURE 2. The choice of the factors affecting teaching and counselling methods

If studying takes place on the Web, the teacher has to take into account the available technical connections, instruments and their quality. He/she must be familiar with the available opportunities, but also their capability.

Modern technology bends almost everything, but the teacher must plan his/her teaching in advance. He/she has to invest in the selection of teaching methods more than in a normal classroom situation. If, for example, you want to analyse and evaluate students' written productions, on a real-time session, it requires a number of things:

- a) First, it is advised to the participants in advance so that they know the procedures (such as the session time and duration, which tool is used, what the web address is that they need to login).
- b) Second, the teacher must ensure that the participants will be able to use this tool, and that they have the necessary equipment (e.g. headsets).
- c) Third, the teacher must also ensure that the students' output is available somewhere for a prior familiarisation and instruct them, if necessary.
- d) Fourth, the teacher must also ensure that the output is suitable for presentation in this real-time tool.

Otherwise, the working time can easily be spent in vain and not on the interaction between matter and content processing. The participants will become frustrated easily if the session is only a struggle with technical problems, or if the flow of the session is not planned in advance.

Keep it simple! (KIS)

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DEVELOPMENT AS A PART OF TEACHERS' WORK

Maija Hirvonen & Martti Majuri

This part of the handbook is based on the experiences of the Training of Teachers (ToT) project and on former research, experiences and literature. The text consists of the description of the tools, which were used in one project case, but could also be used as a part of systematic development work especially in educational organisations. The purpose of the ToT project was to support Tribhuvan University, Faculty of Education (Tu-FoE), to implement the upgrading programme for working teachers by means of “Open and Distance Learning” (ODL). The framework of the ToT project was divided into three themes:

- ICT and ODL as a training model & educational method
- Development work
- Pedagogy and adult learners' assessment and evaluation and the teacher's profession.

There were the following goals for the development work theme:

- Reflect on the common framework for the development of the ODL as a new learning environment for different subjects and students
- To inspire the participants to produce ideas for development work
- To give structure for development work for a two-year project cycle.

The goal of the development work in the ToT programme was to create pedagogical frameworks appropriate for the new learning environment and to improve the quality of the organisational environment in which these modes of education take place. It was designed to enhance the skills of the participants in the use of innovative methods and to encourage professional growth.

When developing the ODL framework in the context of teacher training, it is useful to analyse the situation from the point of the following perspectives:

- a) teacher trainers: to be applied in teacher training programmes (how to build and evaluate a good learning environment for teacher training?)

- b) teachers: when planning the modules and courses, what kind of learning environment supports the learning?
- c) management: how to evaluate the learning environments at the university, campus and school level?

Any development work requires collaboration between the participants. For example, the ToT project was implemented in six campuses of the Tribhuvan University around the country. Therefore, a common framework based on collaboration was needed (the collaboration between the management, the ICT staff, the teacher trainers and the working teachers). The working methods within the workshops were planned to encourage the teacher trainers to actively discuss different frameworks for the development work from the perspective of their own campuses. Additionally, the target was to produce information on the variation between campuses and teacher trainers, on the level of ODL skills, attitudes and Nepalese teacher trainers' work.

The methods used were based on the participatory approach, shared expertise and co-operative working methods. The theoretical background for the working was on the reflective action learning concept.

THE FRAMEWORK FOR THE DEVELOPMENT WORK THEME

The theme "Development work" was based on the action research features. Action research is carried out by people directly concerned with the social situation that is being researched. It is usually initiated by individual practitioners (here, teacher trainers) and it

- 1 starts from practical questions arising from everyday professional practice. It aims to develop both the practical situation and the knowledge about the practice of the participants,
- 2 must be compatible with the educational values of the workplace and with its working conditions,
- 3 offers a repertoire of methods and strategies for researching and developing practice,
- 4 reflection opens up new options for action and is examined by being realised in action.

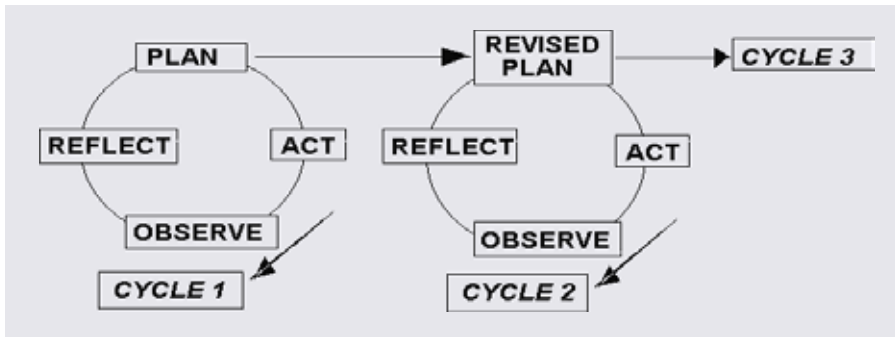


Figure 1. Action Research cycle in a development project

Action research was chosen for the framework of the ODL development projects in the campuses. Action research can be used as a method to improve organisational change and to stimulate learning processes in and between organisations. Interactive feedback sessions of the research results offer opportunities to understand the reasons underlying failure and stimulate interaction processes as well as a joint search process for alternative action. Making sense together of the reasons underlying failure can help people in organisations learn to handle future change processes more effectively (Weerkman & Boostra 2015).

The benefits of action research are:

- It deals with own problems, not someone else's.
- It can start now – or whenever the participants are ready – providing immediate results.
- Action research provides the participants with opportunities to better understand and, therefore, improve their educational practices.
- As a process, action research promotes the building of stronger relationships among staff.
- Importantly, action research provides educators with alternative ways of viewing and approaching educational questions providing a new way of examining their own practices (Mertler & Charles 2008).

Because any development work is cyclic, the development of the new innovation (here ODL) must be based on the collaboration and common reflection of the participants, where the planning, acting, reflecting and revision phases are changing.

The evaluation of any development project following the action research cycle requires systematic feedback, reflection and revised action plans. There are different ways of collecting feedback.

DEVELOPMENT PROJECT CYCLES

In any development project, there are the following steps:

- The planning phase, which starts with the formulation of the issue. In the ToT project, the focus was on the advancement of new, innovative methods (ODL) in the teacher training (upgrading programme) of the TuFoE. The goal for the conceptualisation of the development target (ODL) was to discover, on the one hand, a common understanding on development goals on the university level and, on the other hand, to discover campus-specific development targets.
- The evaluation phase starts after the implementation of new innovation has started. The evaluation is an ongoing process – not done at the end of the project. The goal of the continuation of the evaluation is to improve quality but, first and foremost, to improve the commitment of the participants.

PLANNING PHASE IN THE TOT PROGRAMME

In the ToT project, the main goal for the teacher trainers was to start developing Open and Distance learning (ODL) in their campuses. However, it was essential to get the broader development work started. The research cycle was introduced and simultaneously a SWOT analysis was launched to the teacher trainers in order to find out the core questions concerning the campus-based development needs. The task was to analyse

- 1 personal level and
- 2 the campus-level situation for the development work. The task was performed in pair work. The outcomes were presented using Word documents or PowerPoint.

The SWOT analysis is a tool used often in participatory planning approaches, although it was originally developed for strategic planning in business and marketing purposes. It must be taken into account that SWOT is only a tool and has to be based on a sound knowledge of the present situation and trends (Terrados, Almonacid & Hontoria 2007).

The SWOT analysis aims to identify the strengths and weaknesses of an organisation and the opportunities and threats in the environment. Having identified these factors, strategies are developed which may build on the strengths, eliminate the weaknesses, exploit the opportunities or counter the threats. The strengths and weaknesses are identified by an internal appraisal of the organisation and the opportunities and threats by an external appraisal. The internal appraisal examines all the aspects of the organisation covering, for example, personnel, facilities, location, products and services in order to identify the organisation's strengths and weaknesses (Dyson 2004).

SWOT



Figure 2. SWOT analysis

THE DIFFERENT FACTORS IN THE ANALYSIS ARE:

Strengths:

- What advantages does your organisation have?
- What do you do better than anyone else?

Weaknesses:

- What could you improve?
- What should you avoid?

Opportunities:

- What good opportunities can you spot?
- What interesting trends are you aware of?

Threats:

- What obstacles do you face?

The SWOT analysis produced useful information on the differences between campuses and on the ways the participants experienced their strengths, weaknesses, opportunities and threats in terms of the ODL development. At the same time, the presentation of the campus-based SWOT analyses increased understanding of the challenges in the different campuses. The SWOT analysis also produced important information on the overall need for the development of the ODL. It laid common ground for campus-specific development goals.

In addition, in order to get the development going, different campuses prepared a baseline study including both quantitative and qualitative developmental challenges. The quantitative data consisted of information on the ICT skills of the personnel, ICT resources and equipment. The qualitative data focused on finding out the culture and attitudes of the whole personnel towards the development work. The baseline study also included interviews with the working teachers.

EVALUATION PHASE IN THE TOT PROGRAMME

Evaluation means a systematic acquisition and assessment of information to provide useful feedback about a programme, policy, technology, person, need or activity. The main goal of any evaluation is to provide useful feedback to the developers and participants of a project. Evaluation can be exploited in the decision-making phase and in the reformulation of the project goals and show new alternatives for the implementation of the project through the provision of empirically-driven feedback.

When starting a new programme, it is very important to integrate the evaluation in the other work tasks and in the implementation. Evaluation data should be collected and analysed already at the beginning of a programme or project. Evaluation makes it possible to follow how the targets are reached and also help identify the needs for the possible changes of the original project or programme plans. The following questions may help in making the evaluation plan:

Focusing the evaluation

- What are you going to evaluate?
- What is the purpose of the evaluation?
- Who will use the evaluation? How will they use it?
- What questions will the evaluation seek to answer?
- What information do you need to answer the questions (indicators, kind of information; qualitative or quantitative)?
- When is the evaluation needed?
- What resources do you need – time, money, people?

Collecting the information

- What sources of information will you use?
- What data collection methods will you use?
- What collection procedures will you use?

Using the information

- How will the data be analysed?
- How will the information be interpreted – by whom?
- How will the evaluation be communicated and shared?

Managing the evaluation

- Implementing the plan
- Budgeting
- Finalising the plan.

In order to design an effective online learning environment, we need to reassess the components within it: the structure, technology, context, pedagogy and individual factors. Online education can encourage new kinds of learning. Students' deep learning and critical thinking skills can be increased when learnt collaboratively or under problem-based scenarios. When students are learning in problem-based practical learning, more interaction between the students is caused, and students learn more actively.

In the ToT programme, the following evaluation tools were presented for the teacher trainers for their use in the campus-based development work.

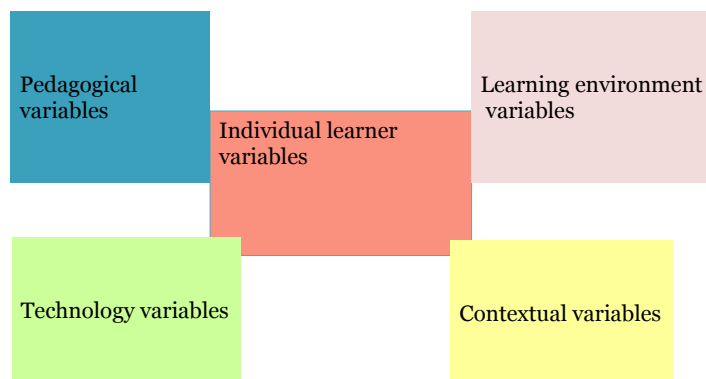


Figure 3. Different aspects in the evaluation of the ODL

Any learning environment is contextual depending e.g. on socio-economic factors, political context, cultural background or geographic location (e.g. country, language, urban, rural area). In the online learning environment, technological variables are significant (e.g. hardware, software, connectivity, media and mode of delivery). Also the learner’s environment plays an important role: the immediate learning environment and the organisational or institutional environment.

	Structured	Semi-Structured	Open
Qualitative feedback	Questionnaires; Open questions	Focus-group discussions; thematic discussions	Open discussions; e.g. Aquarium-discussion method
Quantitative feedback	Multiple-choice questionnaires (paper or online-questionnaires)	Semi-structured questionnaires	

Figure 4. Examples of organisation’s evaluation

When designing the evaluation scheme, it is important to plan the purpose, goals, target groups, timetable and responsibilities of researchers of the evaluation. The methodology of the evaluation depends on the above factors.

Activities	Time/Date	Location	Responsible	Resource

Figure 5. Planning the next steps in a development project

In Figure 5, there is a tool which might be useful in planning the steps of the development project. As mentioned earlier, the evaluation activities should also be scheduled according to the targets and other activities so that it will

be possible to make changes and corrections, if needed and if possible.

One effective group-based method is called “Aquarium”. It enhances the participants of the group to formulate the problems and to accumulate different solutions to the problems. The process is cumulative: it starts from formulating the problem and dividing the participants into small groups. The first group starts to discuss defining the problem for about 10 minutes and each following group has to continue where the previous group ended. The task of the last group is to summarise all the given suggestions and formulate a solution proposal.

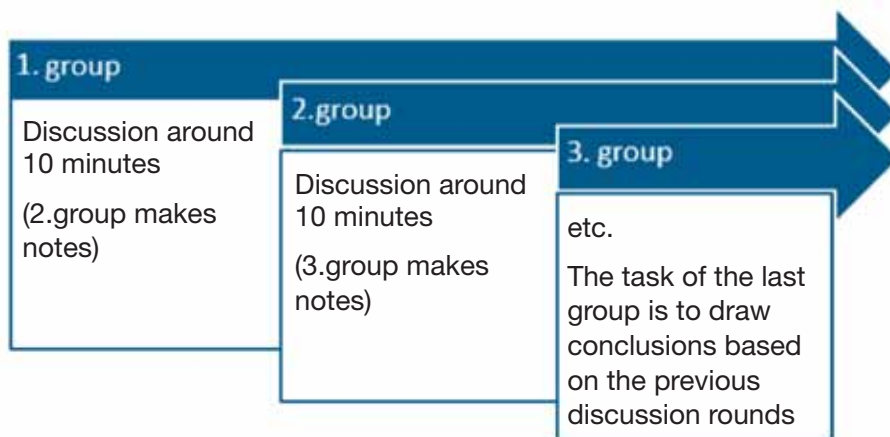


Figure 6. Aquarium method

Another evaluation example is a personal one: it can be used in addition to the group-based methods. Personal self-evaluation target points should be focused on the ongoing project. It can help increasing feedback and information on the individual aspects of the development project.

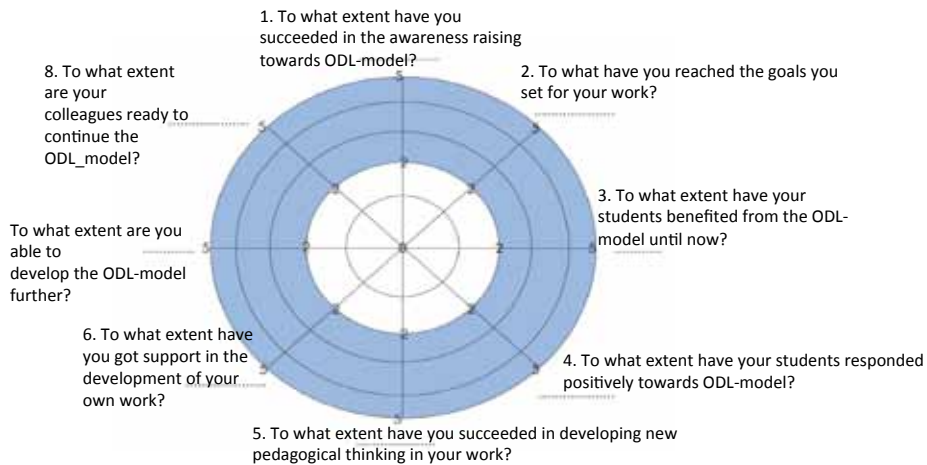


Figure 7. Personal self-evaluation

To be able to develop the quality of learning environments and education as well, it is important to integrate the evaluation process in all the levels of the organisation and stages of the programme. The examples of this article show how the evaluation supports the development of

- individual teachers and learners
- teams, subjects, campuses
- networks with, for example, the schools of working teachers
- university
- regions with stakeholders.

The evaluation is not only a method to check that all these levels work towards the shared target according to joint strategy, but also a method to make changes if needed.

EXAMPLE: INDIVIDUAL LEARNER FACTORS

The above factors may sometimes be out of reach of teachers. However, orchestrating learning is the core task of any teacher. When designing an effective online learning environment, teachers need to take into account the pedagogical variables, such as:

- Accessibility issues
- Methodologies
- Flexibility
- Learner autonomy
- Level and nature of learner support systems
- Selection and recruitment
- Assessment and examination
- Accreditation and certification.

There are several requirements for an effective online learning environment, first of all a proper planning. A detailed course plan is needed:

- To analyse both students' and instructor's needs and class objective
- To select course materials for students' knowledge construction
- To design activities, discussion topics, projects and assessment
- To envision any potential technical or academic problems
- To test the feasibility of the online course.

Advantages of effective online learning can be the encouragement of students' deep learning. The pedagogical design should be based on collaborative and problem-based learning which will involve students thinking critically, actively, and deeply. However, students are individuals with their own personal background. It is important to take into account different individual learning variables, such as:

- Physical characteristics (age, sex, physical abilities)
- Learning history
- Learner attitude
- Learner motivation
- Learning style
- Familiarity with the technology.

Teachers can apply the student-centred approach and analyse the learner's characteristics; who are the online learners and how fluently can they use computers and the Internet? Students need to be well informed on the knowledge which is collaboratively constructed, not transmitted. Students need to be motivated and willing to learn. They need to take full responsibility for their own learning. In order to create a "mental white space" for reflection, inaccurate prior learning should be identified and corrected.

To analyse students' learning styles, a simple online survey or questionnaire can help the teacher know more about his/her students' learning styles. A tool for assessing individual learner variables is the VARQ analysis, which is a learning style test (How do I learn best?). Individuals vary in the ways they perceive, adopt and learn information. Some use the visual learning channel, some aural whereas some students prefer learning by the doing/kinesthetic learning style. In order to enhance learning, learning activities need to appropriately match student learning styles. A teacher also needs to be aware of his/her own learning preferences because it reflects the ways we teach. It controls your understanding of learning to such a powerful extent that you will not even realise. We very often use the teaching style which we ourselves would like to apply in our learning. However, quizzes and questionnaires are no truths but only helping tools for a learner to reflect upon his/her own learning, and for a teacher to consider his/her own teaching style to meet the needs of all learners. However, quizzes and questionnaires

are not truths but only helping tools for a learner to reflect upon his/her own learning, and for a teacher to consider his/her own teaching style to meet the needs of all learners.

The contents of this article have a close connection to quality assurance work, management and pedagogical leadership. These aspects might be their own focus areas in the next project and articles in the future.

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EPILOGUE

The development of education is always a multidimensional process in which the development of human resources, structures, pedagogy and teaching and learning culture are intertwined. These articles tell about the main contents of developing open and distance learning in Nepal. However, the articles can only provide a shade of the rich and fruitful development process that became concretised as new ways of providing and implementing training at Tribhuvan University.

There is not just one model for starting to build up an open and distance learning system. This publication introduces the viewpoints that were relevant in this case, context and time. Pedagogical development, which new technologies are integrated into, changes in a wider sense the whole culture of the educational institution. One of the key matters to successful solutions is the communal development of learning environments and organisation culture, collaborative approach and shared vision. While evaluation is tied to all development phases as was suggested in this publication, continuing improvement is inbuilt in the mindset of the personnel and evaluation practices.

The Training of Trainers for the Teacher Qualification Upgrading Programme in Nepal lasted only two years (2013–2015). In spring 2015, an earthquake occurred in Nepal and seriously destroyed some of the campuses of Tribhuvan University that were involved in the project. Accordingly, the development activities were stopped for a while. Regardless of the short time for development, the first open and distance learning implementations became true at six campuses of the university. The started development work requires continuation and support in order to make open and distance learning a seamless part of the activities of Tribhuvan University.



The door to Open and Distance Learning (Picture: Tuovi Leppänen, 2015).

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Open and Distance Learning is one mean to provide learning opportunities and to implement the idea of equal opportunities and the right to education. This publication focuses on the development of open and distance learning at Tribhuvan University in Nepal, in which there was a need to establish a new mode of learning for the population that is working. This publication describes the basis from which the structures, strategies and teaching and learning processes of open and distance learning were created and implemented for the first time at Tribhuvan University.

The development collaboration that this publication focuses on concerns the Training of Trainers for the Teacher Qualification Upgrading Programme in Nepal (ToT Nepal) funded by the Ministry of Foreign Affairs of Finland, HEI ICI programme. The main goal of the programme was to strengthen the capacity of Tribhuvan University to establish an open and distance learning system.

ISBN 978-951-830-414-5



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